

REMARKS

I. Status Of Claims

Claims 1-36 are pending in the present application. Claims 1, 5, 7, 8, 10, 14, 29, 30, and 31 are amended herein. Claims 3, 4, 6, 12, 15-25, and 32-36 are canceled. Therefore, upon entry of this Amendment, Claims 1, 2, 5, 7-11, 13, 14, and 26-31 will be pending. No new matter has been introduced by the present amendment. Reconsideration of the application as amended and based on the arguments set forth hereinbelow is respectfully requested.

Claim 1 has been amended to include features recited by original Claims 20, 22, 24 and 25.

Claim 31 has been amended to include features recited by original Claims 32 and 33.

II. Claims Objections

The Examiner objected to Claims 1 and 31 because the Examiner contends that the claims do not clearly recite the preamble and the body. (Official Action, page 2). Claims 1 and 31 have been amended herein to clearly recite the preamble and body. Applicants respectfully submit that the preamble and body of Claims 1 and 31 are now sufficiently clear. For this reason, it is respectfully submitted that the objection to Claims 1 and 31 should be withdrawn.

III. Claim Rejections Under 35 U.S.C. § 112

Claims 1-36 stand rejected by the Examiner under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the claimed subject matter. (Official Action, page 2). Regarding Claim 1 the Examiner stated that the phrase “the voltage” at line 6, the phrase “the potential node” at line 7, and the phrase “the charge” at line 13 lack clear antecedent basis. (Official Action, page 2). These phrases have been deleted by the amendments herein. Therefore, the rejection of Claim 1 under 35 U.S.C. §112, second paragraph, for due to lack of antecedent basis is moot.

Further, regarding Claim 1, the Examiner stated that the description of the present subject matter is incomplete because the comparator and the controller are not connected to anything. (Official Action, page 2). Further, the Examiner stated that the claimed comparator and the controller may not perform the recited function. (Official Action, page 2). Claim 1 has been amended to recite connections of the comparator and the controller. For example, Claim 1 has been amended to recite that the comparator is connected to the signal output of an operation amplifier. Further, for example, Claim 1 has been amended to recite that the controller is connected to the comparator. It is respectfully submitted that Claim 1 now recites proper connections for the comparator and controller.

The Examiner also stated that the comparator and controller recited by Claim 31 are not connected to anything. (Official Action, page 2). Claim 31 does not recite a

comparator or a controller. Applicants respectfully submit that Claim 31 recites language for properly interrelating the elements of the claim.

Regarding Claim 3, the Examiner stated that it is unclear where the word “switches” comes from and how they are provided to vary the charge. (Official Action, page 3). Claim 3 has been canceled. Therefore, the rejection of Claim 3 is moot.

Regarding Claim 8, the Examiner stated that the phrase “the number” lacks clear antecedent basis. (Official Action, page 3). The phrase “the number” in Claim 3 has been amended to “a number”. For this reason, applicants respectfully submit that this phrase in Claim 8 now has proper antecedent basis.

Regarding Claim 17, the Examiner stated that it is not understood how the tuning capacitors can be function of the coded tuning control signal and what the function is. (Official Action, page 3). Claim 17 has been canceled. Therefore, the rejection of Claim 17 is moot.

Regarding Claim 12, the Examiner stated that it is not understood what the phrase “basic capacitance” is and where it comes from. (Official Action, page 3). Claim 12 has been canceled. Therefore, the rejection of Claim 12 is moot.

Regarding Claim 14, the Examiner stated that the phrase “can be” at line 2 is indefinite because it does not positively recited the claimed subject matter. (Official Action, page 3). Claim 14 has been amended to replace the phrase “can be switched” with the phrase “is switchable”. Applicants respectfully submit that Claim 14 now positively recites the claimed subject matter.

Regarding Claim 15, the Examiner stated it is not understood how the filter stage can have a “completely differential amplifier” and whether this “amplifier” is additional or a further recitation of the previously recited “comparator” in Claim 1. (Official Action, page 3). The Examiner also stated that the same is true for reciting “amplifier” in Claim 16, 17, and 29. Claims 15-17 have been canceled. Therefore, the rejection of Claims 15-17 is moot. Regarding Claim 29, Claim 29 has been amended to recite that the analog filter is a differential analog filter. Applicants respectfully submit that the amendments to Claim 29 make clear that the analog filter recited by Claim 1 is being further defined in Claim 29.

Further, regarding Claim 16, the Examiner stated that particular phrases recited by the claim lack antecedent basis and are unclear. (Official Action, page 3). As stated above, Claim 16 has been canceled. Therefore, the rejection of Claim 16 is moot.

The Examiner rejected Claims 18, 21, and 23 for a variety of reasons. (Official Action, page 3). Claims 18, 21, and 23 have been canceled. Therefore, the rejection of Claims 18, 21, and 23 is moot.

Regarding Claim 22, the Examiner stated that the phrase “the second input of the comparator can alternatively be connected by means of switches” is misdescriptive because it is inconsistent with what is recited by Claim 22. (Official Action, pages 3 and 4). As stated above, Claim 22 has been canceled. Therefore, the rejection of Claim 22 is moot.

Regarding Claims 25, 32, and 35, the Examiner provided various reasons for rejecting Claims 25, 32, 35. (Official Action, page 4). Claims 25, 32, and 35 have been canceled. Therefore, the rejection of Claims 25, 32, and 35 is moot.

The Examiner stated that all of the remaining dependent claims are considered indefinite because the claims depend from other rejected claims. (Official Action, page 4). For the reasons provided above, applicants respectfully submit that these remaining dependent claims are now definite because the dependent claims depend from claims that are in proper form for the reasons provided above.

For the reasons provided above and the claim amendments herein, applicants respectfully submit that the rejection of Claims 1-36 under 35 U.S.C. § 112, second paragraph, should be withdrawn.

IV. Claim Rejections Under 35 U.S.C. § 103

Claims 1-13 and 26-32 stand rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,677,814 to Low et al. (hereinafter, "Low") in view of U.S. Patent No. 6,842,710 to Gehring et al. (hereinafter, "Gehring"). Claims 14-21 stand rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over Low in view of Gehring and further in view of U.S. Patent No. 5,982,228 to Khorramabadi et al. (hereinafter, "Khorramabadi") and U.S. Patent No. 6,069,505 to Babanezhad (hereinafter, "Babanezhad"). These rejections are respectfully traversed for the reasons set forth below.

Applicants note that the Examiner has indicated that Claims 22-25 would be allowable if rewritten to overcome the rejection under 35 U.S.C. §112, second

paragraph, and to include all of the features of the base claim and any intervening claims. (Official Action, page 7). Applicants have amended Claim 1 to include the features of original Claim 1 and dependent Claims 22, 24, and 25 in accordance with the Examiner's suggestion. Further, for the reasons provided above, the rejection under 35 U.S.C. §112, second paragraph, has been overcome. Therefore, applicants submit that the rejection of Claim 1 under 35 U.S.C. §103(a) should be withdrawn and the claim should be allowed.

Claims 3, 4, 6, 12, and 15-25 have been canceled. Therefore, the rejection of Claims 3, 4, 6, 12, and 15-25 under 35 U.S.C. §103(a) should be withdrawn.

Claims 2, 5, 7-11, 13-14, and 26-30 depend from Claim 1, and therefore include the features recited by Claim 1. Therefore, applicants submit that the rejection of Claims 2, 5, 7-11, 13-14, and 26-30 under 35 U.S.C. §103(a) should be withdrawn and the claims should be allowed.

Further, applicants note that the Examiner has indicated that Claims 33-36 would be allowable if rewritten to overcome the rejection under 35 U.S.C. §112, second paragraph, and to include all of the features of the base claim and any intervening claims. (Official Action, page 7). Applicants have amended Claim 31 to include the features of original Claim 31 and dependent Claims 32 and 33 in accordance with the Examiner's suggestion. Further, for the reasons provided above, the rejection under 35 U.S.C. §112, second paragraph, has been overcome. Therefore, applicants submit that the rejection of Claim 31 under 35 U.S.C. §103(a) should be withdrawn and the claim should be allowed.

Claim 32 has been canceled. Therefore, the rejection of Claim 32 under 35 U.S.C. §103(a) should be withdrawn.

V. Allowable Subject Matter

As noted above, the Examiner has indicated that Claims 22-25 would be allowable if rewritten to overcome the rejection under 35 U.S.C. §112, second paragraph, and to include all of the features of the base claim and any intervening claims. (Official Action, page 7). As stated above, applicants have amended Claim 1 to include the features of original Claim 1 and dependent Claims 22, 24, and 25. Therefore, applicants respectfully submit that Claim 1 should now be formally allowed.

Further, as noted above, the Examiner has indicated that Claims 33-36 would be allowable if rewritten to overcome the rejection under 35 U.S.C. §112, second paragraph, and to include all of the features of the base claim and any intervening claims. (Official Action, page 7). As stated above, applicants have amended Claim 31 to include the features of original Claim 31 and dependent Claims 32 and 33. Therefore, applicants respectfully submit that Claim 31 should now be formally allowed.

CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and such action is earnestly solicited.

If any minor issues should remain outstanding after the Examiner has had an opportunity to study the Amendment and Remarks, it is respectfully requested that the Examiner telephone the undersigned attorney so that all such matters may be resolved and the application placed in condition for allowance without the necessity for another Action and/or Amendment.

DEPOSIT ACCOUNT

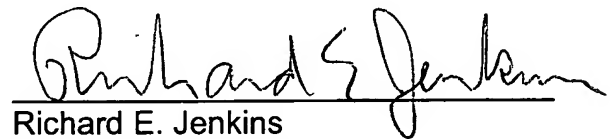
Although it is believed that no fee is due, the Commissioner is hereby authorized to charge any deficiencies of payment associated with the filing of this Response to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.

Date: September 13, 2005

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